

BASF Aktiengesellschaft

July 3, 2003
B02/0889US IB/HN/jw

5

Claims

1. A process for the alkoxylation of a monool with at least one alkoxyating agent to a polyoxyalkylene alcohol wherein a catalyst is employed which comprises a metallo-organic framework material of metal ions and at least bidentate coordinately bound organic ligands.
10
2. The process according to claim 1, wherein the metal ion is selected among ions of elements of groups Ia, IIa, IIIa, IVa to VIIIa and Ib to VIb of the periodic table of the elements.
15
3. The process according to claim 1, wherein the bidentate organic ligand is selected among substituted and unsubstituted mono- and polynuclear aromatic polycarboxylic acids and substituted or unsubstituted aromatic mono- and polynuclear polycarboxylic acids which comprise at least one hetero atom.
20
4. The process according to claim 3, wherein the ligand is terephthalic acid or a derivative thereof.
- 25 5. The process according to claim 1, wherein the metallo-organic framework material exhibits a specific surface area, as determined via adsorption, of $> 20 \text{ m}^2/\text{g}$.
6. The process according to claim 1, wherein the alkoxylation agent is selected among mono- and multifunctional epoxides having 2 to 30 carbon atoms mixtures of two or more thereof.
30
7. The process according to claim 6, wherein the epoxide is selected from ethylene oxide, propylene oxide, butylenes oxides and mixtures thereof.

8. An alkoxyated alcohol obtained in the process according to claim 1.
9. The method of using an alcohol according to claim 8 as tenside, flotation oil,
5 lubricating liquid, hydraulic fluid, carrier liquid or in polyurethane foams.
10. The method of using according to claim 9 where the alcohol is selected from monools
of linear and branched alkyl groups having 1 to 30 carbon atoms, which alkyl groups
may carry one or more aryl substituents, of homo- and polynuclear aromatic groups
10 having 4 to 30 carbon atoms, which aromatic groups may carry one or more alkyl
substituents, and of linear and branched alkenyl groups having 2 to 30 carbon atoms
and which alkenyl groups may carry one or more aryl substituents.